Profile

Idraparinux is a factor Xa inhibitor under investigation in the management of thromboembolism.

♦ References.

- Buller HR, et al. van Gogh Investigators. Idraparinux versus standard therapy for venous thromboembolic disease. N Engl J Med 2007; 357: 1094–1104.
- Buller HR, et al. van Gogh Investigators. Extended prophylaxis
 of venous thromboembolism with idraparinux. N Engl J Med
 2007; 357: 1105–12.
- 3. Bousser MG, et al. Amadeus Investigators. Comparison of idraparinux with vitamin K antagonists for prevention of throm-boembolism in patients with atrial fibrillation: a randomised, open-label, non-inferiority trial. *Lancet* 2008; **371**: 315-21.
- Prandoni P, et al. Idraparinux: review of its clinical efficacy and safety for prevention and treatment of thromboembolic disor-ders. Expert Opin Invest Drugs 2008; 17: 773–7.

Ifenprodil Tartrate (HNNM)

Ifenprodil, Tartrate d'; Ifenprodili Tartras; RC-61-91; Tartrato de ifenprodil. (±)-2-(4-Benzylpiperidino)-I-(4-hydroxyphenyl)propan-I-ol tartrate.

Ифенпродила Тартрат

 $(C_{21}H_{27}NO_2)_2$, $(A_{16}O_6 = 801.0.$ CAS = 23210-56-2 (ifenprodil); 23210-58-4 (ifenprodil) tartrate). ATC — C04AX28.

ATC Vet — QC04AX28.

Pharmacopoeias. In Jpn.

Profile

Ifenprodil tartrate is a vasodilator, with alpha-adrenoceptor blocking properties, used in peripheral vascular disease (p.1178). It is given in usual oral doses of 40 to 60 mg daily, and has also been given by deep intramuscular injection, slow intravenous injection, or intravenous infusion.

Preparations

Proprietary Preparations (details are given in Part 3)

lloprost (BAN, USAN, rINN)

Ciloprost; Iloprostum; ZK-36374; ZK-00036374. (E)-(3aS,4R,5R,6aS)-Hexahydro-5-hydroxy-4-[(E)-(3S,4RS)-3-hydroxy-4-methyl-1-octen-6-ynyl]-Δ^{2(1H)}, -pentalenevaleric acid. Илопрост

 $C_{22}H_{32}^{\prime}O_4 = 360.5.$

CAS — 73873-87-7; 78919-13-8.

ATC - BOTACII.

ATC Vet - QB01AC11

Iloprost Trometamol (BANM, rINNM)

Ciloprost Tromethamine; Iloprost Trométamol; Iloprost Tromethamine; Iloprostum Trometamolum.

Илопрост Трометамол $C_{22}H_{32}O_4, C_4H_{11}NO_3 = 481.6$ ATC — BOTACTI.

ATC Vet — QB01AC11.

Adverse Effects and Precautions

As for Epoprostenol, p.1279. Inhaled iloprost may

Effects on the cardiovascular system. Hypotension was observed1 in 2 of 6 patients given iloprost. Both patients recov-

ered rapidly when iloprost was stopped, although one required intravenous atropine to correct sinus bradycardia

Evidence of myocardial ischaemia was reported in 4 of 33 patients with coronary artery disease during iloprost infusion.2 The same authors³ noted a similar effect in 4 of 28 patients with stable angina in a subsequent study. According to one study,4 there might be an increased risk of thromboembolism in some patients given iloprost, due to platelet activation and enhanced coagula-

- 1. Upward JW, et al. Hypotension in response to iloprost, a prosta-
- cyclin analogue. *Br J Clin Pharmacol* 1986; **21**: 241–3.

 2. Bugiardini R, *et al.* Myocardial ischemia induced by prostacyclin and iloprost. *Clin Pharmacol Ther* 1985; **38**: 101–8.
- 3. Bugiardini R, et al. Effects of iloprost, a stable prostacyclin analog, on exercise capacity and platelet aggregation in stable angina pectoris. Am J Cardiol 1986; **58:** 453–9.
- Kovacs IB, et al. Infusion of a stable prostacyclin analogue, ilo-prost, to patients with peripheral vascular disease: lack of an-tiplatelet effect but risk of thromboembolism. Am J Med 1991;

Pregnancy. For reference to the successful use of iloprost in pregnancy see Pulmonary Hypertension, under Uses and Administration, below.

Interactions

Iloprost may increase the effect of other vasodilators and antihypertensives. The use of iloprost with other inhibitors of platelet aggregation may increase the risk of bleeding.

Pharmacokinetics

On intravenous infusion iloprost is rapidly cleared from the plasma by oxidation. About 80% of the metabolites are excreted in urine and 20% in the bile.

Uses and Administration

Iloprost, a vasodilator and platelet aggregation inhibitor, is a stable analogue of the prostaglandin epoprostenol (prostacyclin). It is given as the trometamol salt in the treatment of peripheral vascular disease and pulmonary hypertension but doses are described in terms of iloprost; 1.3 nanograms of iloprost trometamol is equivalent to about 1 nanogram of iloprost.

The usual dose for peripheral vascular disease is the equivalent of iloprost 0.5 to 2 nanograms/kg per minute for 6 hours daily by intravenous infusion. The course of treatment may be up to 4 weeks. For pulmonary hypertension, the dose is 1 to 8 nanograms/kg per minute for 6 hours daily; alternatively, iloprost may be given by nebulised solution at a dose of 2.5 or 5 micrograms inhaled 6 to 9 times daily. Doses should be reduced in patients with hepatic or renal impairment (see below).

Oral iloprost is under investigation.

◊ Reviews

 Grant SM, Goa KL. Iloprost: a review of its pharmacodynamic and pharmacokinetic properties, and therapeutic potential in peripheral vascular disease, myocardial ischaemia and extracorporeal circulation procedures. Drugs 1992; 43: 889-924

Administration in hepatic or renal impairment. The dose of intravenous iloprost should be reduced, and may need to be halved, in patients with liver cirrhosis or renal impairment requiring dialysis. In hepatic impairment, the initial dose of inhaled iloprost should be 2.5 micrograms given at intervals of at least 3 hours to a maximum of 6 times daily; the dose may be cautiously increased or given more frequently according to patient re-

Peripheral vascular disease. Prostaglandins, including iloprost, 1-10 have been used in the treatment of peripheral vascular disease (p.1178), particularly in severe Raynaud's syndrome (see Vasospastic Arterial Disorders, p.1188), but do not constitute mainline therapy. Systematic review¹⁰ suggests that intravenous iloprost produces prolonged benefit in Raynaud's phenomenon secondary to scleroderma. The benefits of oral iloprost are less clear. It is also unclear whether iloprost infusion is of benefit in occlusive peripheral arterial disease due to atherosclerosis: although a meta-analysis of (conflicting) controlled trials did suggest an effect,6 firm conclusions are difficult.

- 1. Waller PC, et al. Placebo controlled trial of iloprost in patients with stable intermittent claudication. Br J Clin Pharmacol 1986; 21: 562P-563P.
- 2. Rademaker M, et al. Comparison of intravenous infusions of iloprost and oral nifedipine in treatment of Raynaud's phenomenon in patients with systemic sclerosis: a double blind randomised study. *BMJ* 1989; **298**: 561–4.
- Fiessinger JN, Schäfer M. Trial of iloprost versus aspirin treatment for critical limb ischaemia of thromboangiitis obliterans. *Lancet* 1990; 335: 555–7.
- Zahavi J, et al. Ischaemic necrotic toes associated with antiphospholipid syndrome and treated with iloprost. Lancet 1993; 342: 862.

- Tait IS, et al. Management of intra-arterial injection injury with iloprost. Lancet 1994; 343: 419.
 Loosemore TM, et al. A meta-analysis of randomized placebo control trials in Fontaine stages III and IV peripheral occlusive arterial disease. Int Angiol 1994; 13: 133–42.
- Wigley FM, et al. Oral iloprost treatment in patients with Ray-naud's phenomenon secondary to systemic sclerosis: a multi-center, placebo-controlled, double-blind study. Arthritis Rheum 1998; 41: 670–7.
- 1996, 41: 0/0-7.
 8. Black CM, et al. Oral iloprost in Raynaud's phenomenon secondary to systemic sclerosis: a multicentre, placebo-controlled, dose-comparison study. Br J Rheumatol 1998; 37: 952-60.
- Oserza R, et al. Effects of long-term cyclic iloprost therapy in systemic sclerosis with Raynaud's phenomenon: a randomized, controlled study. Clin Exp Rheumatol 2001; 19: 503–8.
 10. Pope J, et al. Iloprost and cisaprost for Raynaud's phenomenon in progressive systemic sclerosis. Available in The Cochrane Database of Systematic Reviews; Issue 2. Chichester: John Willey: 1008 (2020) (2020) lev: 1998 (accessed 16/06/05).

Pulmonary hypertension. Epoprostenol is an accepted part of the management of pulmonary hypertension (p.1179) and the use of iloprost, a stable analogue, has been studied. Inhaled iloprost may have a role;1 it was found2 to improve walking-test distances, reduce severity of heart failure, and stabilise haemody-namic measures in a 12-week study of patients with severe pulmonary hypertension, while long-term treatment of at least 1 year has been reported to have sustained beneficial effects.3 Iloprost has also been used successfully in a few cases to manage pulmonary hypertension in pregnant women.⁴ There are also reports of effective combination therapy using inhaled iloprost with intravenous epoprostenol,⁵ oral sildenafil,⁶ or oral bosentan.7 Continuous intravenous infusion8 has also been tried with beneficial results over several weeks, and short-term intravenous infusion for 7 days9 has been successfully used for pulmonary hypertension after pulmonary thromboendarterectomy.

- Baker SE, Hockman RH. Inhaled iloprost in pulmonary arterial hypertension. Ann Pharmacother 2005; 39: 1265-73.
- nypertension. Ann Fnarmacomer 2005; 39: 1205–73.

 Ollschewski H, et al. Inhaled iloprost for severe pulmonary hypertension. N Engl J Med 2002; 347: 322–9.

 3. Hoeper MM, et al. Long-term treatment of primary pulmonary hypertension with aerosolized iloprost, a prostacyclin analogue. N Engl J Med 2000; 342: 1866–70.
- Elliot CA, et al. The use of iloprost in early pregnancy in patients with pulmonary arterial hypertension. Eur Respir J 2005; 26: 168–73.
- Petkov V, et al. Aerosolised iloprost improves pulmonary haemodynamics in patients with primary pulmonary hypertension receiving continuous epoprostenol treatment. Thorax 2001;
- 6. Ghofrani HA, et al. Combination therapy with oral sildenafil and inhaled iloprost for severe pulmonary hypertension. *Ann Intern Med* 2002; **136**: 515–22.
- 7. McLaughlin VV, et al. Randomized study of adding inhaled iloprost to existing bosentan in pulmonary arterial hypertension. Am J Respir Crit Care Med 2006; 174: 1257–63.
- 8. Higenbottam TW, et al. Treatment of pulmonary hypertension with the continuous infusion of a prostacyclin analogue, iloprost. Heart 1998: 79: 175-9
- 9. Hsu H-H, et al. Short-term intravenous iloprost for treatment of reperfusion lung oedema after pulmonary thromboendarterectomy. *Thorax* 2007; **62:** 459–61.

Thrombotic microangiopathies. For reports of the use of iloprost in patients with thrombotic microangiopathies such as thrombotic thrombocytopenic purpura, see under Epoprostenol, p.1281.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Ilomedine†: Ventavis†: Austria: Ilomedin; Chile: Ventavis; Cz.: Ilomedin; Ventavis; Denm.: Ilomedin; Ventavis; Fin.: Ilomedin; Ventavis; Ger.: Ilomedin; Ventavis; Fin.: Ilomedin; Ventavis; Hong Kong: Ilomedin; Ventavis; Hong Kong: Ilomedin; Ventavis; Hong: Ilomedin; Ventavis; Intimaterial: Ilomedin; Ventavis; Intimaterial: Ilomedin; Ventavis; Nation: Ilomedin; Ventavis; Nation: Ilomedin; Ventavis; Nation: Ilomedin; Ventavis; Nation: Ilomedin; Ventavis; Spain: Ilomedin; Ventavis; Spain: Ilomedin; Ventavis; Spain: Ilomedin; Ventavis; Ventavis; Ilomedin; Turk.: Ilomedin; UK: Ventavis; USA: Ventavis.

Imidapril Hydrochloride (BANM, rINNM)

Hidrocloruro de imidapril; Imidaprillihydrokloridi; Imidapril, Chlorhydrate d'; Imidaprilhydroklorid; Imidaprili Hydrochloridum; TA-6366. (S)-3-{N-[(S)-1-Ethoxycarbonyl-3-phenylpropyl]-L-alanyl}-I-methyl-2-oxoimidazoline-4-carboxylic acid hydrochloride.

Имидаприла Гидрохлорид

 $C_{20}H_{27}N_3O_6$, HCI = 441.9

CAS — 89371-37-9 (imidapril); 89396-94-1 (imidapril hydrochloride).

ATC - C09AA16

ATC Vet - QC09AA16.

Adverse Effects, Treatment, and Precautions

As for ACE inhibitors, p.1193.

Interactions

As for ACE inhibitors, p.1196.

Pharmacokinetics

Imidapril acts as a prodrug of the diacid imidaprilat, its active metabolite. After oral doses, imidapril is rapidly but incompletely absorbed; absorption is about 70% and is reduced in the presence of food. Imidapril is metabolised in the liver to imidaprilat. The bioavailability of imidaprilat is about 42% after oral doses of imidapril, and peak plasma concentrations of imidaprilat are reached in about 7 hours. Both imidapril and imidaprilat are moderately bound to plasma proteins. About 40% of an oral dose is excreted in the urine, the rest in the faeces. The terminal half-life of imidaprilat is more than 24 hours. Imidapril and imidaprilat are removed by haemodialysis.

♦ References

- Hoogkamer JFW, et al. Pharmacokinetics of imidapril and its active metabolite imidaprilat following single dose and during steady state in patients with impaired liver function. Eur J Clin 100 July Pharmacol 1997; 51: 489-91.
- 2. Hoogkamer JFW, et al. Pharmacokinetics of imidapril and its acrhogkamet Jrw, et al. Friannacokinetics of inhidapin and its active metabolite imidaprilat following single dose and during steady state in patients with chronic renal failure. Eur J Clin Pharmacol 1998; **54:** 59–61.
- 3. Harder S, et al. Single dose and steady state pharmacokinetics and pharmacodynamics of the ACE-inhibitor imidapril in hypertensive patients. Br J Clin Pharmacol 1998; 45: 377-80.
- 4. Tsuruoka S, et al. Clearance of imidapril, an angiotensin-converting enzyme inhibitor, during hemodialysis in hypertensive renal failure patients: comparison with quinapril and enalapril. J Clin Pharmacol 2007; 47: 259-63.

Uses and Administration

Imidapril is an ACE inhibitor (p.1193). It is used in the treatment of hypertension (p.1171). Imidapril owes its activity to imidaprilat, to which it is converted after oral doses. The maximum haemodynamic effect occurs 6 to 8 hours after a dose, although the full effect may not develop for several weeks during chronic dosing. Imidapril is given orally as the hydrochloride.

In the treatment of hypertension, the usual initial dose of imidapril hydrochloride is 5 mg once daily, before food. Since there may be a precipitous fall in blood pressure in some patients when starting therapy with an ACE inhibitor, the first dose should preferably be given at bedtime. An initial dose of 2.5 mg daily should be used in the elderly, in patients with renal or hepatic impairment, or in those receiving a diuretic; if possible, the diuretic should be withdrawn 2 or 3 days before imidapril is started and resumed later if necessary. The usual maintenance dose is 10 mg daily, although up to 20 mg daily may be given if required. The maximum dose for elderly patients is 10 mg daily.

◊ Reviews

1. Robinson DM, et al. Imidapril: a review of its use in essential hypertension, type I diabetic nephropathy and chronic heart failure. *Drugs* 2007; **67:** 1359–78.

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: Tanatril, Austria: Tanatril; Cz.: Tanatril; Fin.: Tanatril; Fre: Tanatril; Ger.: Tanatril; Gr.: Tanatril; Hong Kong: Tanatril; India: Tanatril; Indon: Tanapress; Jon: Novarok; Tanatril; Modaysia: Tanatril; Philipp.: Norten; Vascor; Pol.: Tanatril; Port.: Cardipril; Tanatril; Singapore: Tanatril; Spain: Hipertene: Thai.: Tanatril: UK: Tanatril.

Multi-ingredient: Philipp.: Norplus; Vascoride.

Indapamide (BAN, USAN, rINN) ⊗

Indapamid; Indapamida; Indapamidi; Indapamidum; SE-1520. 4-Chloro-N-(2-methylindolin-1-yl)-3-sulphamoylbenzamide.

 $C_{16}H_{16}CIN_3O_3S = 365.8$

CAS — 26807-65-8 (anhydrous indapamide).

ATC — CO3BAII.

ATC Vet — QC03BA11.

Pharmacopoeias. In Chin., Eur. (see p.vii), and US.

Ph. Eur. 6.2 (Indapamide). A white or almost white powder. Practically insoluble in water; soluble in alcohol. Protect from

USP 31 (Indapamide). A white to off-white crystalline powder. Practically insoluble in water; soluble in alcohol, in glacial acetic acid, in acetonitrile, in ethyl acetate, and in methyl alcohol; very slightly soluble in chloroform and in ether.

Adverse Effects, Treatment, and Precautions

As for Hydrochlorothiazide, p.1307.

Effects on the blood. A 58-year-old woman¹ had bleeding from the mucous membrane of the tongue 18 months after starting treatment with a modified-release form of indapamide; she was found to have mild thrombocytopenia, and petechiae were observed. After withdrawal of the drug, bleeding stopped immediately; the platelet count returned to normal within 10 days and the skin lesions faded quickly.

Hasanova EA, Agasiyeva NE. Bleeding associated with indapamide SR therapy. Ann Pharmacother 2005; 39: 199–200.

Effects on carbohydrate and lipid metabolism. Several studies have reported no changes in blood-glucose concentra-tions during indapamide treatment, ¹⁻³ although elevated concentrations have been reported in individual patients.4,5 There have been reports of increases in total cholesterol2 and of no change.3 No adverse biochemical changes were found in studies⁶ of a modified-release preparation.

- Velussi M, et al. Treatment of mild-to-moderate hypertension with indapamide in type II diabetics: midterm (six months) eval-uation. Curr Ther Res 1988; 44: 1076–86.
- 2. Prisant LM, et al. Biochemical, endocrine, and mineral effects of indapamide in black women, J Clin Pharmacol 1990: 30: 121-6.
- 3. Leonetti G, *et al.* Long-term effects of indapamide: final results of a two-year Italian multicenter study in systemic hypertension. *Am J Cardiol* 1990; **65:** 674–714.
- Slotkoff L. Clinical efficacy and safety of indapamide in the treatment of edema. Am Heart J 1983; 106: 233–7.
- 5. Beling S, et al. Long term experience with indapamide. Am Heart J 1983; 106: 258-62.
- 6. Weidmann P. Metabolic profile of indapamide sustained-release in patients with hypertension: data from three randomised double-blind studies. Drug Safety 2001; 24: 1155-65.

Effects on electrolyte balance. It has been claimed that indapamide produces few adverse biochemical effects at the usual dose of 2.5 mg daily. However, by 2002, 164 cases of hyponatraemia had been reported to the Australian Adverse Drug Reactions Advisory Committee (ADRAC)1, of which 68 also described hypokalaemia. Most patients were elderly women. A review2 of some of these cases suggested that hyponatraemia was more commonly reported with indapamide than with chlorothiazide, although it was pointed out3 that the true incidence cannot be determined from spontaneous reports. ADRAC recommends that indapamide should be used cautiously. It may be that indapamide has no clinical advantage over low-dose thiazide diuretics.

- Australian Adverse Drug Reactions Advisory Committee (ADRAC). Indapamide and hyponatraemia. Aust Adverse Drug React Bull 2002; 21: 11. Also available at: http:// www.tga.health.gov.au/adr/aadrb/aadr0208.htm (accessed 06/07/04)
- Chapman MD, et al. Hyponatraemia and hypokalaemia due to indapamide. Med J Aust 2002; 176: 219–21.
- Howes LG. Hyponatraemia and hypokalaemia caused by indapamide. Med J Aust 2002; 177: 53–4.

Effects on the kidneys. Acute interstitial nephritis was associated with indapamide treatment in a 74-year-old patient.

1. Newstead CG, et al. Interstitial nephritis associated with indapamide. BMJ 1990; 300: 1344.

Effects on the skin. Sixteen cases of skin rash attributed to indapamide had been reported to the Netherlands Centre for Monitoring of Adverse Reactions to Drugs. All patients had taken indapamide 2.5 mg daily for hypertension. The skin rash was accompanied by fever in 5 cases. In all cases the rash subsided within 14 days of withdrawal, and 11 patients subsequently took thiazides, furosemide, or clopamide without recurrence. Among 188 cases of skin rash attributed to indapamide reported to the WHO Collaborating Centre for International Drug Monitoring were 4 cases of erythema multiforme and 2 of epidermal necrolysis. A further case of toxic epidermal necrolysis was reported by independent authors.2

- Stricker BHC, Biriell C. Skin reactions and fever with indapamide. BMJ 1987; 295: 1313–14.

Black RJ, et al. Toxic epidermal necrolysis associated with indapamide. BMJ 1990; 301: 1280–1.

Interactions

As for Hydrochlorothiazide, p.1309.

Pharmacokinetics

Indapamide is rapidly and completely absorbed from the gastrointestinal tract. Elimination is biphasic with a half-life in whole blood of about 14 hours. Indapamide is strongly bound to red blood cells. It is extensively metabolised. About 60 to 70% of the dose has been reported to be excreted in the urine; only about 5 to 7% is excreted unchanged. About 16 to 23% of dose is excreted in the faeces. Indapamide is not removed by haemodialysis but does not accumulate in patients with renal impairment.

♦ References

1. Beermann B, Grind M. Clinical pharmacokinetics of some newer diuretics. Clin Pharmacokinet 1987; 13: 254–66.

Uses and Administration

Indapamide is a diuretic with actions and uses similar to those of the thiazide diuretics (see Hydrochlorothiazide, p.1310) even though it does not contain a thiazide ring system. It is used for hypertension (p.1171), and also for oedema, including that associated with heart failure (p.1165).

In some countries indapamide is described as the hemihydrate. In the treatment of hypertension the usual oral dose is 1.25 to 2.5 mg once daily, either alone, or with other antihypertensives; a modified-release preparation may be given in a dose of 1.5 mg daily. At higher doses the diuretic effect may become apparent without appreciable additional antihypertensive effect although US licensed product information suggests that the dose may be increased to 5 mg after 4 weeks. In the treatment of **oedema** the usual dose is 2.5 mg once daily increasing to 5 mg daily after 1 week if necessarv.

♦ Reviews

- 1. Chaffman M, et al. Indapamide: a review of its pharmacodynamic properties and therapeutic efficacy in hypertension. *Drugs* 1984; **28:** 189–235.
- 2. Robinson DM, Wellington K. Indapamide sustained release: a review of its use in the treatment of hypertension. Drugs 2006; 66: 257-71

Preparations

BP 2008: Indapamide Tablets: USP 31: Indapamide Tablets

Proprietary Preparations (details are given in Part 3)

Arg.: Bajaten; Duremid; Natrilix; Noranat; Austral.: Dapa-Tabs; Indahexal; Insig, Napamide; Natrilix; **Austria**: Fludex; **Belg.:** Docindapa; Fludex; **Braz.:** Indapen; Natrilix; **Canad.:** Lozide; **Chile:** Indapress; Natrilix; **Cz.:** Indap; Indapen; Natrilix, Canad.: Lozide; Chile: Indapress: Natrilix, Cz.: Indap, Rawel; Tertensif; Denm.: Fludex†; Indacar; Natrilix, Fr.: Fludex, Ger.: Inda-Puren; Natrilix, Sicco†; Gr.: Dixamid†; Fludex, Magniton-R; Transipen; Hong Kong: Agelan†; Dapa-Tabs; Diflerix; Frumeron; Indalix, Millibar; Natrilis; Hung.: Apadex; Pretanix; Rawel; India: Indicontin; Inditor; Lorvas; Natrilis; Indon.: Natrilis; Ind.: Agelan†; Inamide†; Natrilis; Israel: Pamid; Ital.: Damide; Indaflex; Indamol; Indolin†; Ipamix; Millibar; Natrilis; Pressural; Veroxil; Malaysia: Dapa; Diflerix; Napamide; Natrilis; Rinalix†; Natrilix; Natrilis; Pressural, veroxii, medinyaic "Dapa, Dillerix, Napalinile, Nataliis, Philipp.: Mex.: Natrilis, Nath.: Fludex, NZ: Napalinide, Naplini†, Natrilis, Philipp.: Natrilis, Poli.: Apo-Indap, Diuresin; Indapers, Indapers, Indapsan; Indix [pres; Rawel; Tertensif; Port.: Arifon; Fludex; Fluidema; Tandix; Vasodipin; Rux.: Akripamide (Акрипамид); Arifon (Арифон); Arindap (Ариндап); Indap (Индал); Indiur (Индаур); Ionik (Ионик); Rawel (PaeeA); Retapres (Peranpec); S.Afr.: Catexan; Dapamax; Daptril; Hydro-Less; Indalix; Lixamide; Natrilix; Singapore: Dapa-Tabs; Millibar†; Napamide; Natrilix; Rinalix; Spain: Extur: Tertensif: Switz.: Fludapamide: Fludex: Thai.: Frumeron: Inpamide; Napamide; Natrilix; Turk.: Flubest; Fludex; Fludin; Flupamid; Flutans; Indamid; Indapen; Indurin; UAE: Indanorm; UK: Natrilix; Nindaxa†; USA: Lozol: Venez.: Natrilix.

Multi-ingredient: Arg.: Bipreterax; Preterax; Austral.: Coversyl Plus; Austria: Delapride; Predonium; Preterax; Belg.: Bi Preterax; Coversyl Plus; Preterax; Braz.: Coversyl Plus; Canad.: Coversyl Plus; Preterax; Cz.: Noliprel; Prenewel; Prestarium Combi; Prestarium Neo Combi; **Denm.:** Coversyl Comp; **Fin.:** Coversyl Comp; **Fr.:** Bipreterax; Preterax; **Ger.:** Coversyl Comp; **Fin.:** Coversyl Comp; **Fi** ersyl Comp; Fin.: Coversyl Comp; Fr.: Bipreterax, Preterax, Ger.: Coversyn Combi; Preterax, Gr.: Dinapres; Preterax, Hong Kong; Predonium; Hung; Armix Komb; Armix Prekomb; Co-Prenessa; Coverex Komb; Coverx Prekomb; Nolipret†; Noriplex†; India: Coversyl Plus; Perigard D; Perigard DF, Tenolol-D†; Inl.: Bipreterax, Coversyl Plus; Preterax; Ital.: Atinorm: Delapride; Dinapres; Nor-Pa; Normopress; Prelectal; Preterax, Nalaysia: Coversyl Plus; Presonium; Preterax; Nat.: Preterax, Pet.: Section 1981; Preterax Pet.: Preterax; Nat.: Preterax; Na niuni, rreterax, Nz.: Coversyl rius, rretorium, rmimpp.: ві-reterax, Pre-terax, Pol.: Noliprel; Prestarium Plus; Port.: ві Predonium; ві Preterax, Pre-donium; Preterax; Rus.: Enzix (Энзикс); Noliprel (Нолипрел); Sonoprel (Сонопрел); S.Afri: Віргеterax; Coversyl Plus; Preterax, Spram; Віргеdonium; Віргеterax, Preter-ax; Switz.: Coversyl Plus; Preterax; Spain: Віргеdonium; Віргеterax, Preter-ax; Switz.: Coversum Combi; Preterax; Turk: Coversyl Plus; Preterax; UK: Coversyl Plus; Venez.: Bipreterax; Preterax